Startup of Motion Control Card

Agenda

- Installation & Testing of PCI-1240U
- Installation & Testing of PCI-1202U

Installation & Testing of PCI-1240U

Driver installation

- **Driver:** PCI1240.exe
  Source: Companion CD\Drivers\PCI\1240.exe
  Website: http://support.advantech.com.tw/support/DownloadSRDetail.aspx?SR_ID=1-C0SSD

- **After the installation, the software manual can be found in** C:\Program Files\Advantech\Motion\PCI-1240\Manual\PCI1240.chm

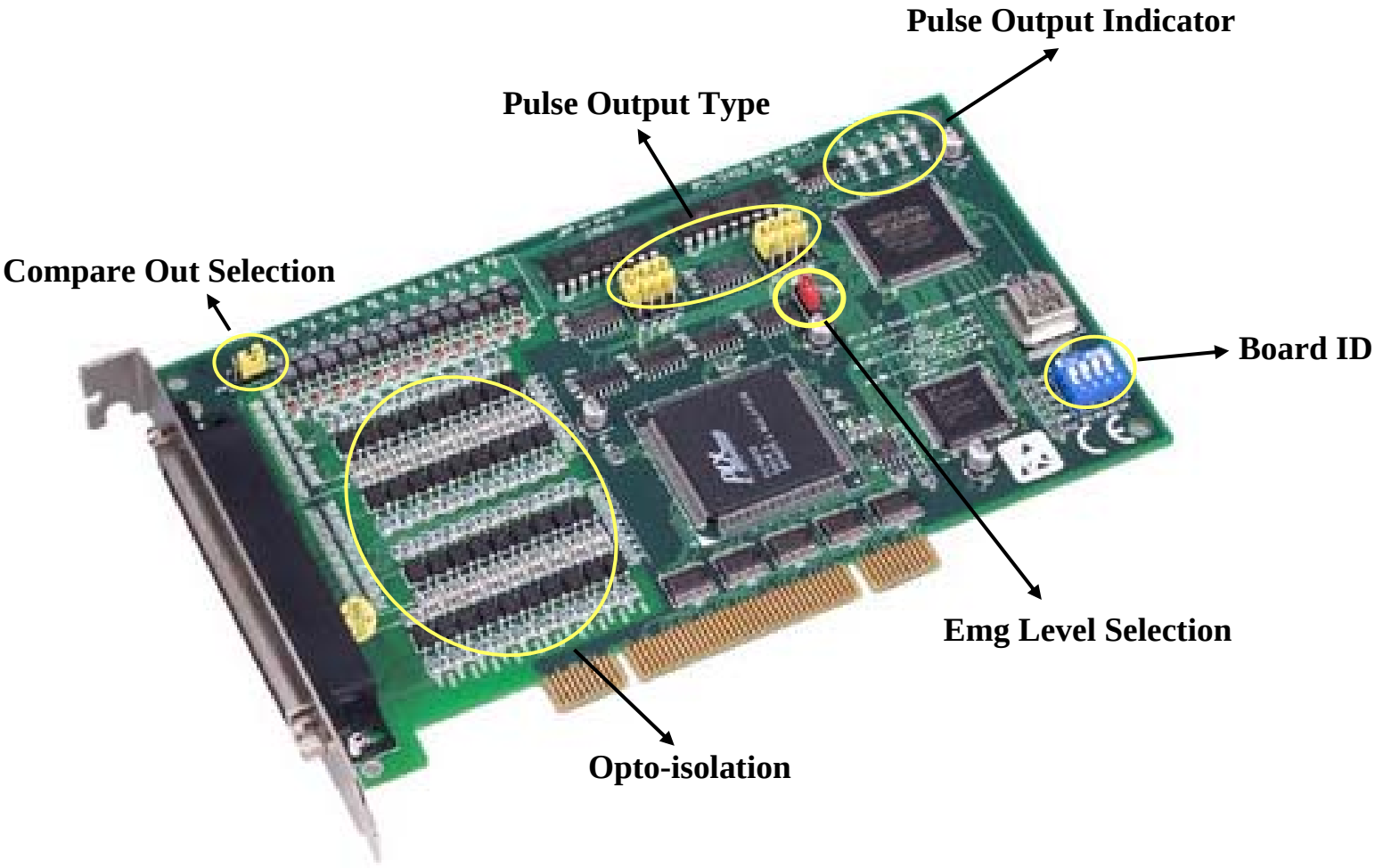
- **VB, VC, BCB, C#, Delphi, VB.NET examples is given at** C:\Program Files\Advantech\Motion\PCI-1240\Example

Jumper and DIP SW Setting

- **Make sure you have installed the software driver first before you plug in the PCI-1240U.**

- **Adjust the Board ID(DIP SW in blue), EMG(JUMPER in red) & Output Pulse Definition (JUMPER in yellow) according to the motor driver connected.**

Locations of Jumpers and DIP Switches



Signal Connection

- **Signals are classified as shown below**

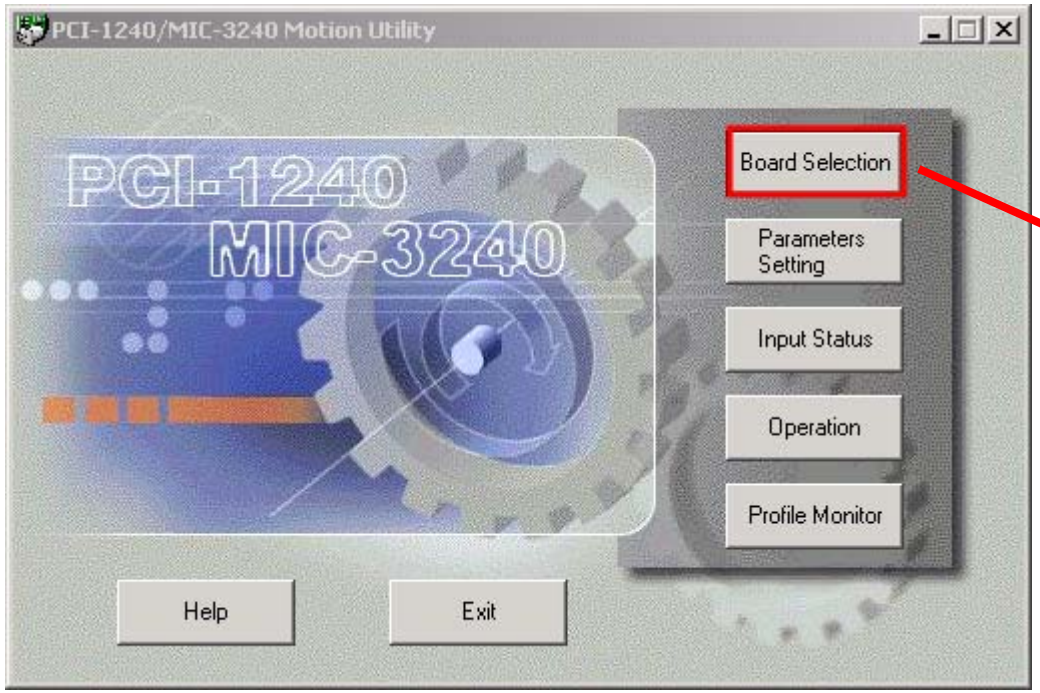
Function	Signals	Note
Driving	P+P, P+N, P-P, P-N	
Feedback	ECAP, ECAN, ECBP, ECBN	
Protection	LMT+, LMT-, EMG	
Home	IN3, IN0P, IN0N	IN3=ORG IN0=index
IO	IN1~2, OUT4~7, INPOS, ALARM, EXOP	OUT6=SVON OUT4,5=CMP
Power	GND, VEX	

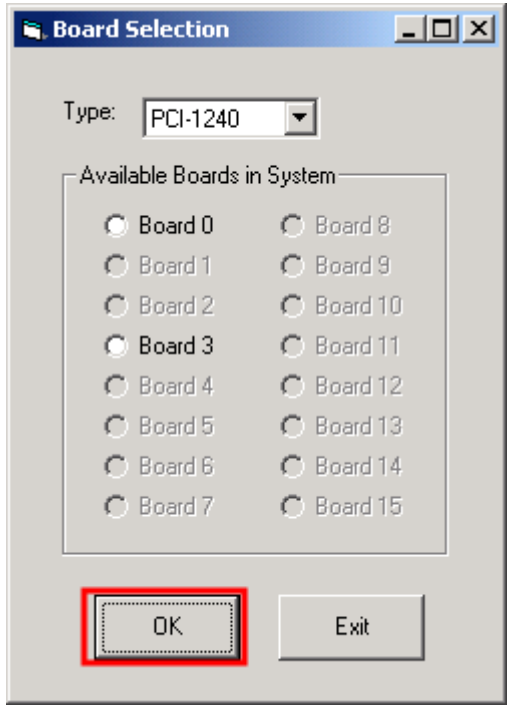
Utility Operation

- **Start Manu → Programs →Advantech Automation → Motion → PCI-1240 → PCI-1240 Utility**

Utility Operation

- **Select BoardID first by “Board Selection” button**

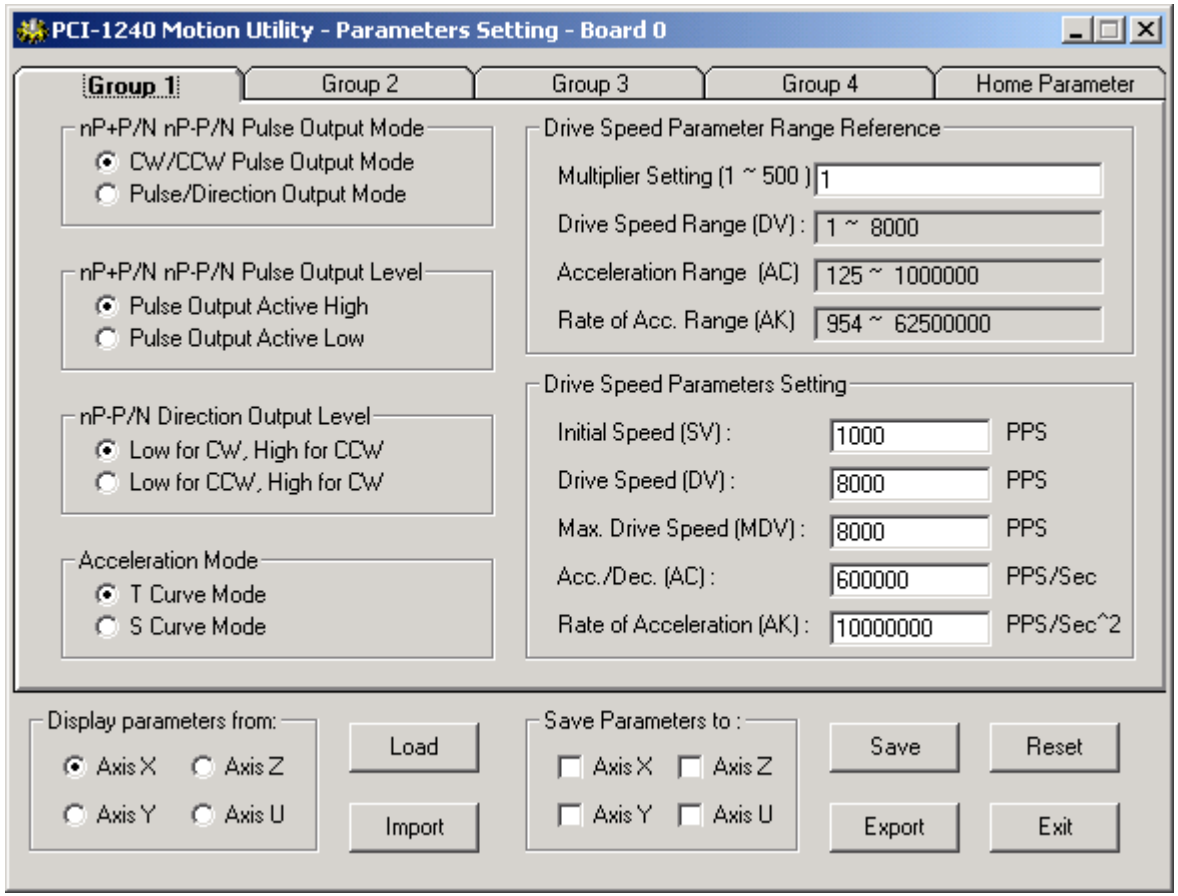




Utility Operation

- **Set parameters by clciking “Parameter Setting” Group 1 is for Pulse Output setting**

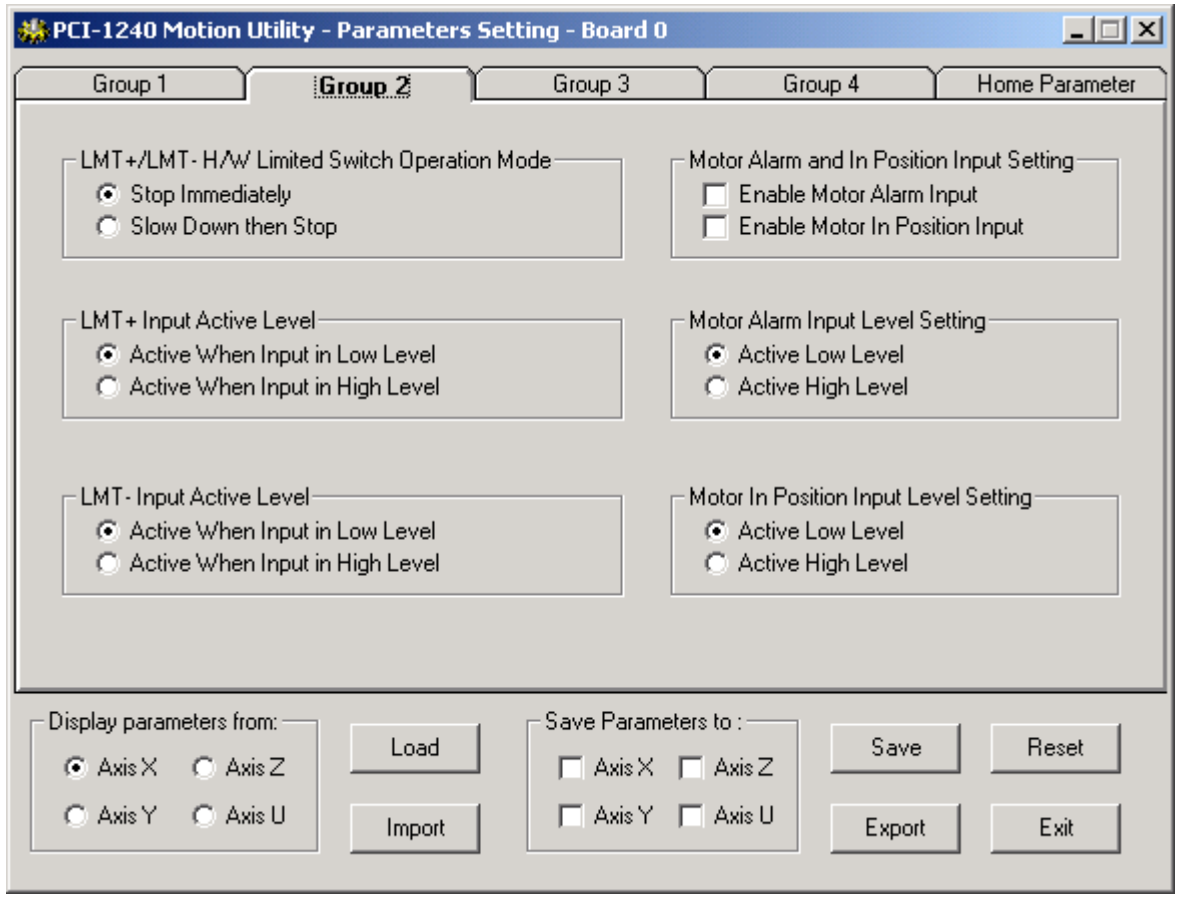
Parameters Setting



Utility Operation

- **Set parameters by clicking “Parameter Setting”** 

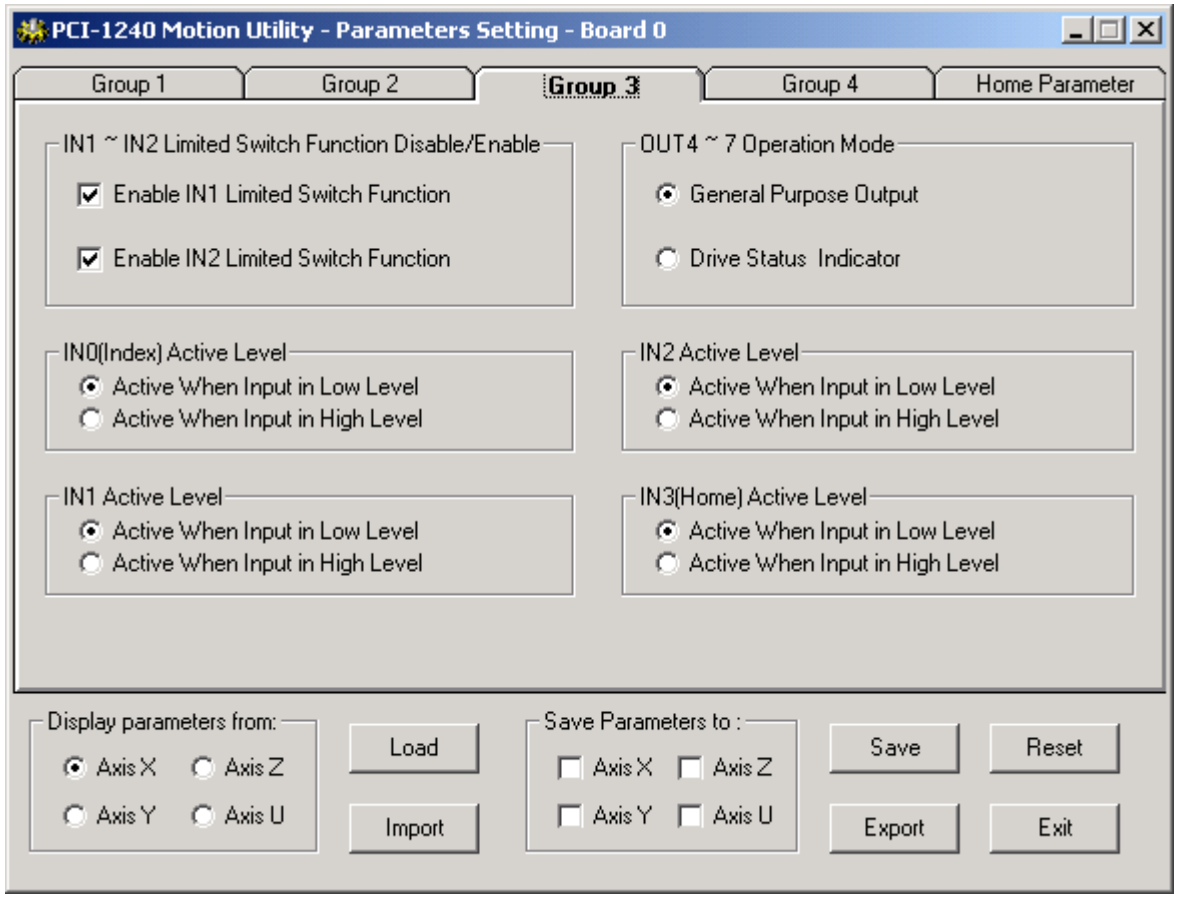
  Group 2 is for HW Input Signal setting



Utility Operation

- **Set parameters by clicking “Parameter Setting” Group 3 is for IN and OUT pin setting**

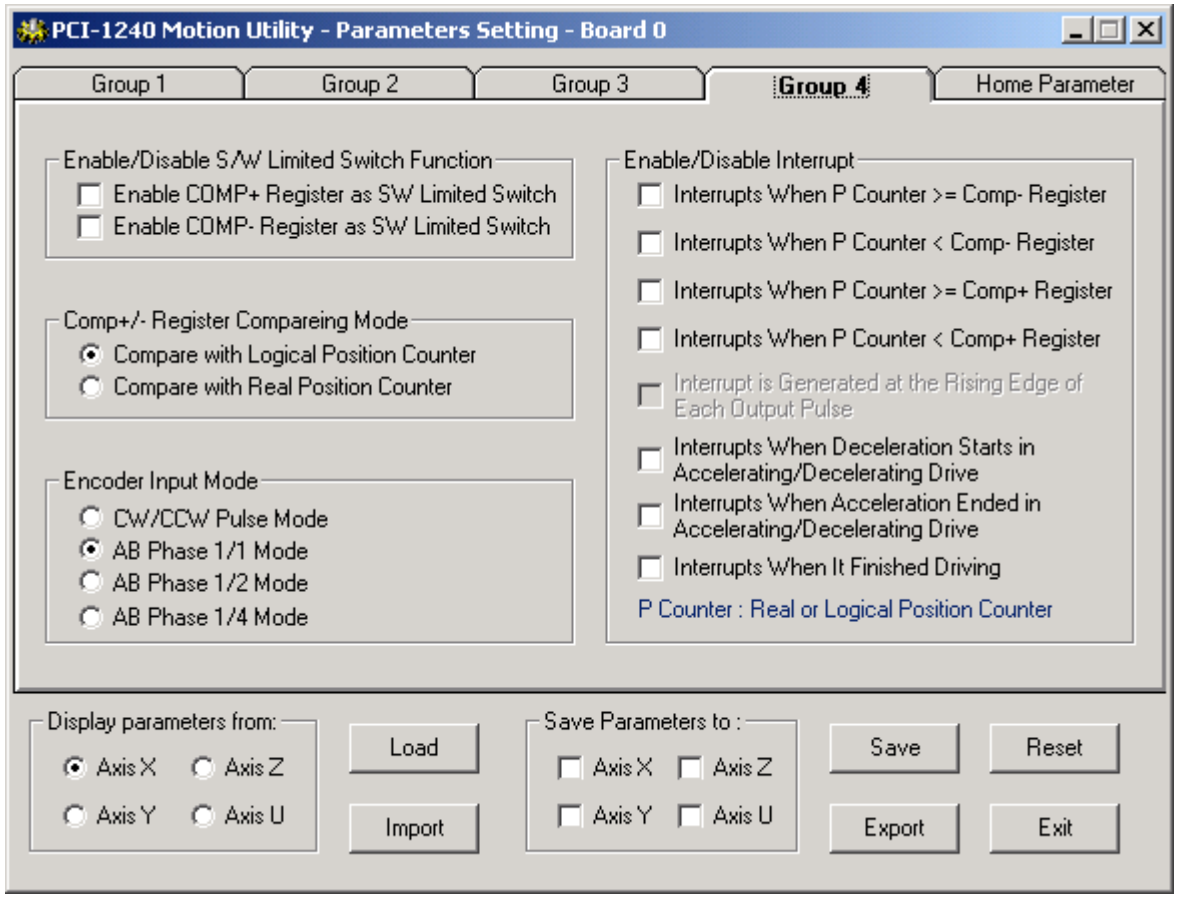
Parameters Setting



Utility Operation

- **Set parameters by clicking "Parameter Setting"** 

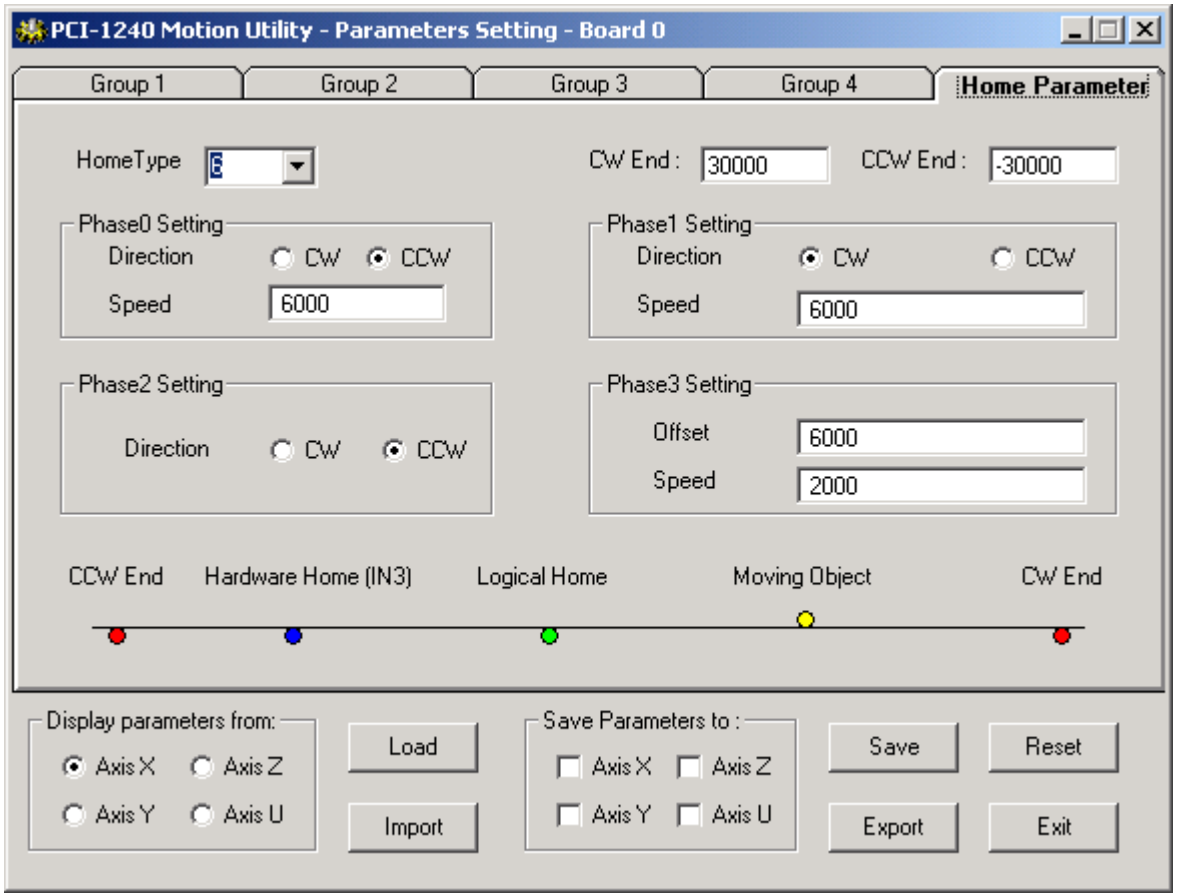
  Group 4 is for Encoder, SW Limit and Compare setting



Utility Operation

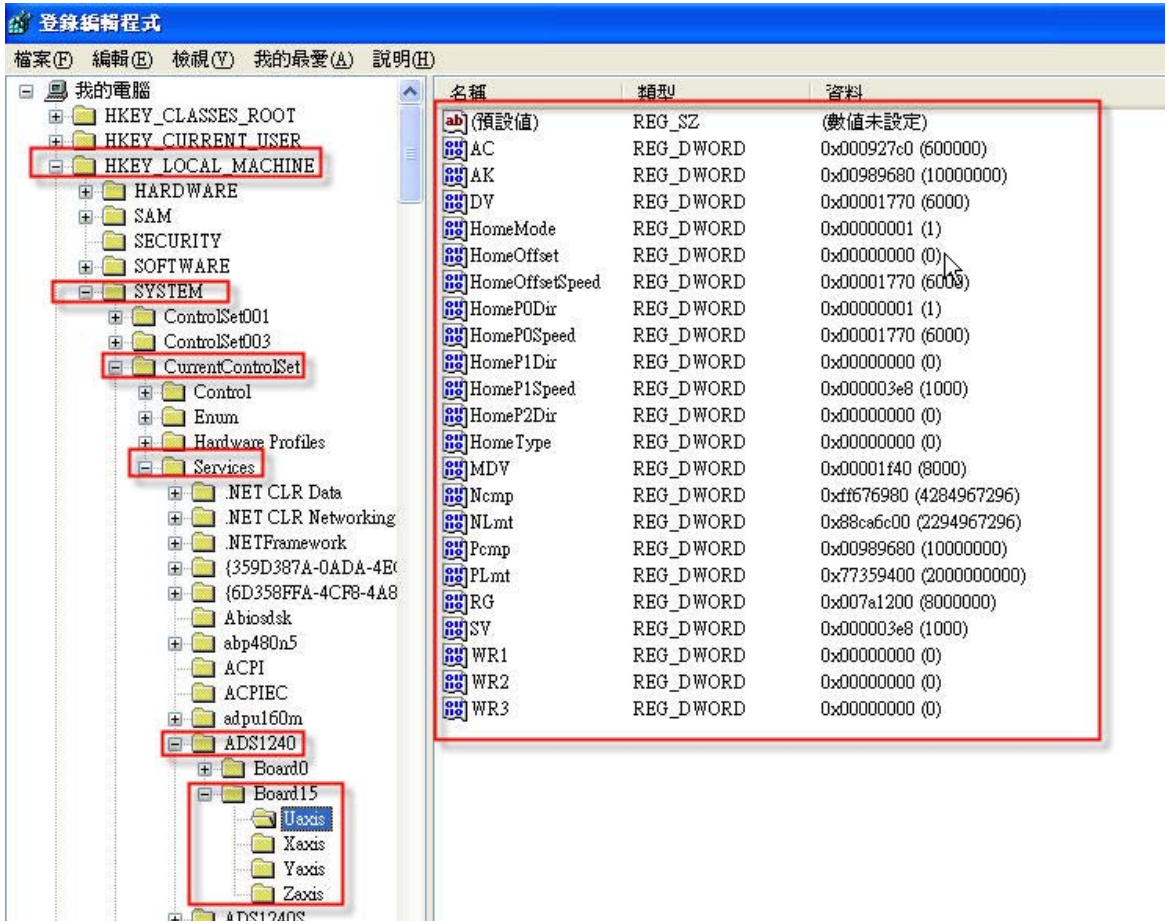
- **Set parameters by clicking “Parameter Setting” Home Parameter is for Home setting**

Parameters Setting



Utility Operation

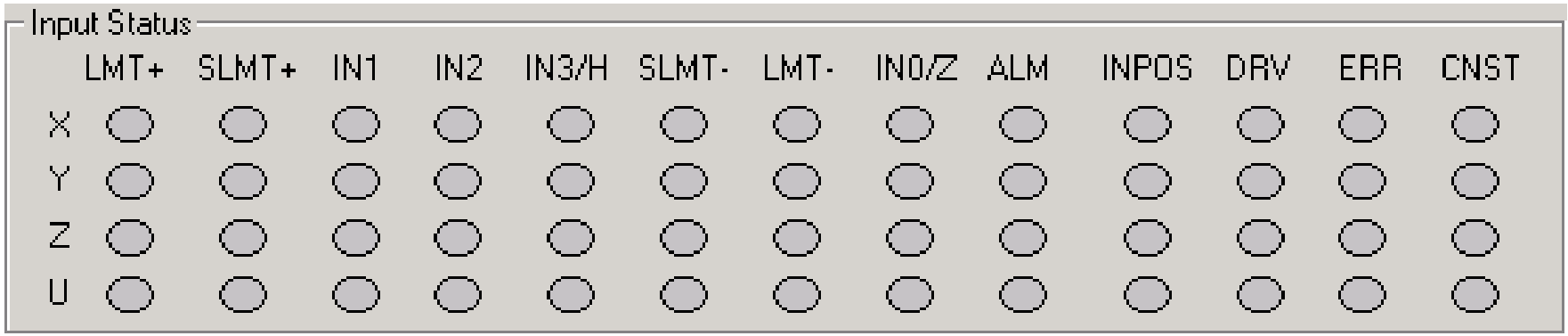
- **All the settings will be saved to registry**



Utility Operation

- **Check IO by clicking “Input Status” button** 

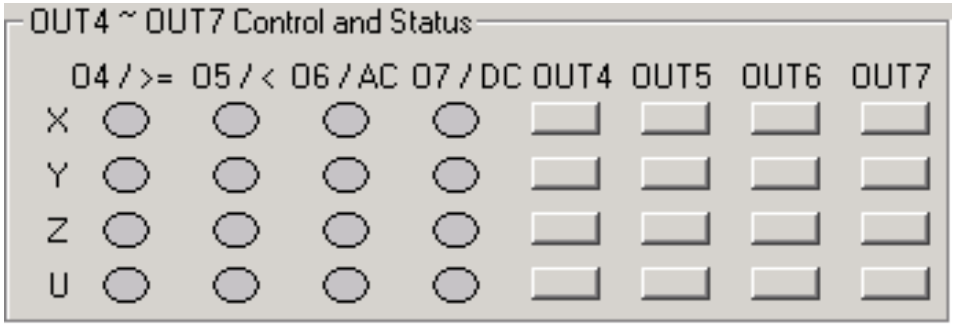
  All input signals can be checked
  IN0/Z is for encoder index
  IN3/H is for ORG(Home)



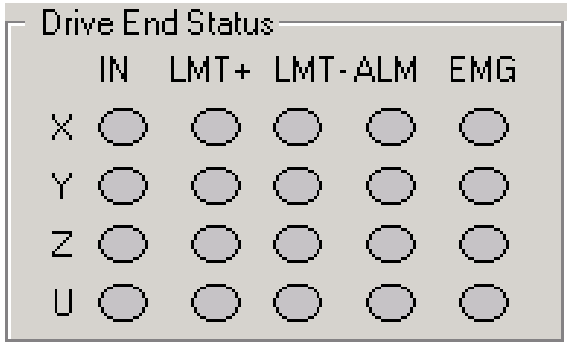
Utility Operation

- **Check IO by clicking “Input Status” button** 

  OUT4~7 can be controlled
  OUT6 is for ServoON



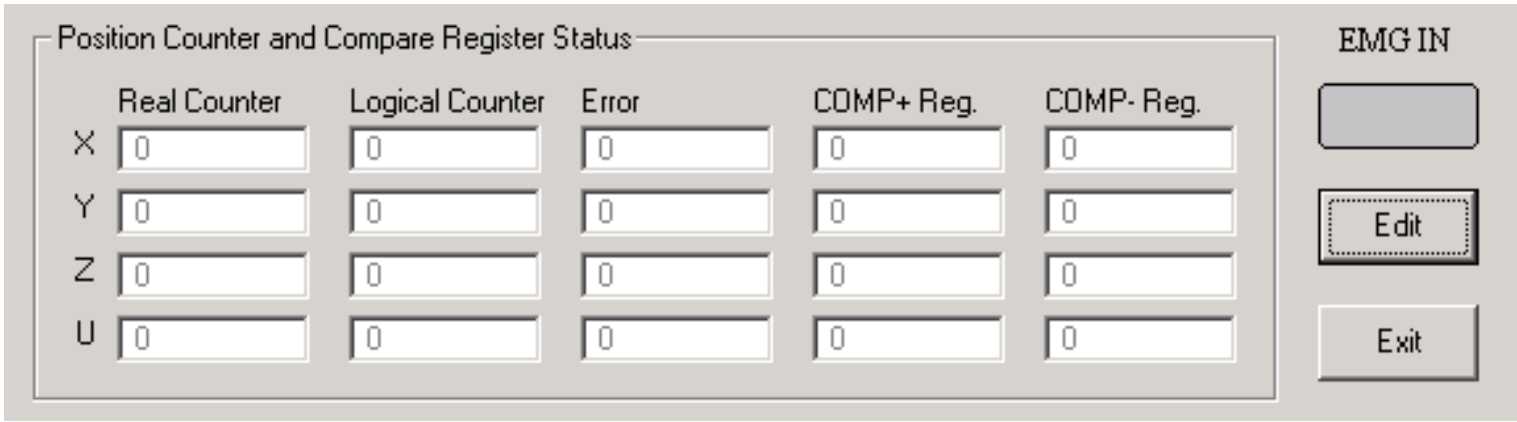
The latest ending status of a moving can be checked



Utility Operation

- **Check IO by clicking “Input Status” button** 

Real counter (encoder feedback) & logical counter (command counter) can be checked

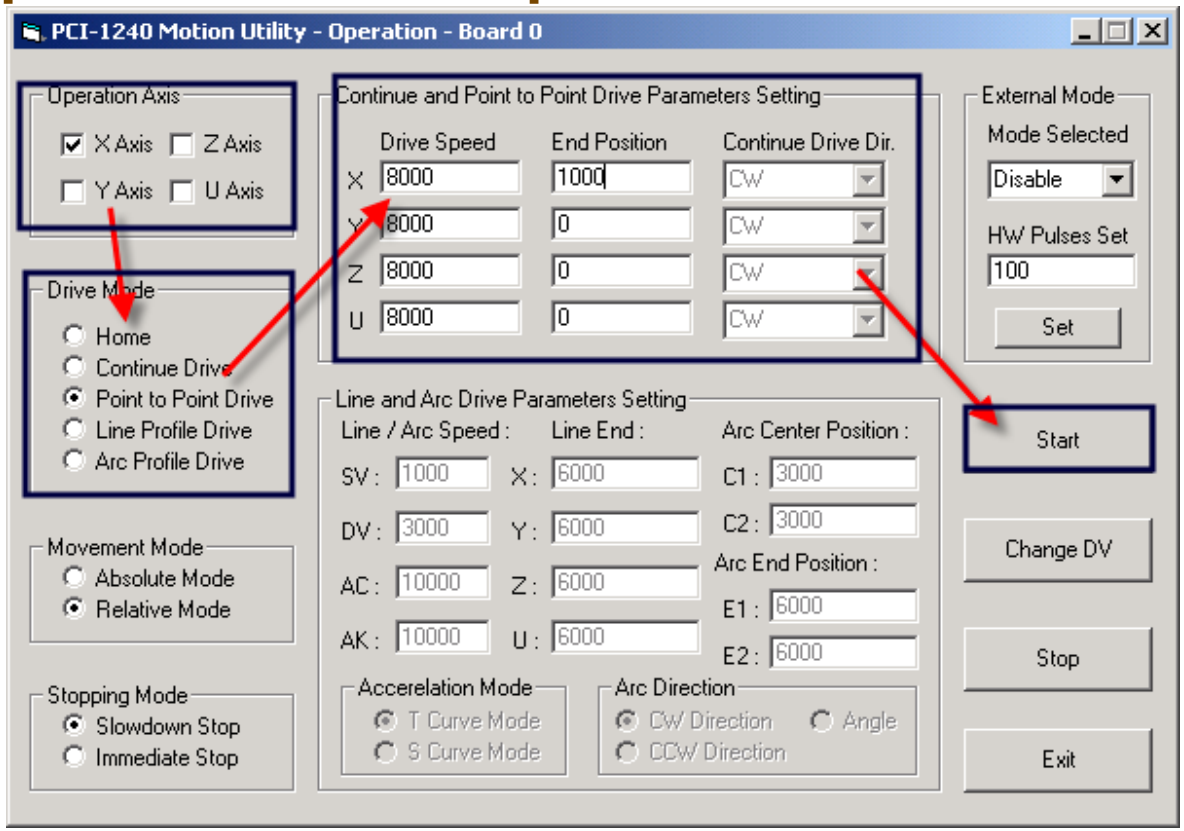


The counter values can also be edit by clicking “Edit” and then clicking “Update”

Utility Operation

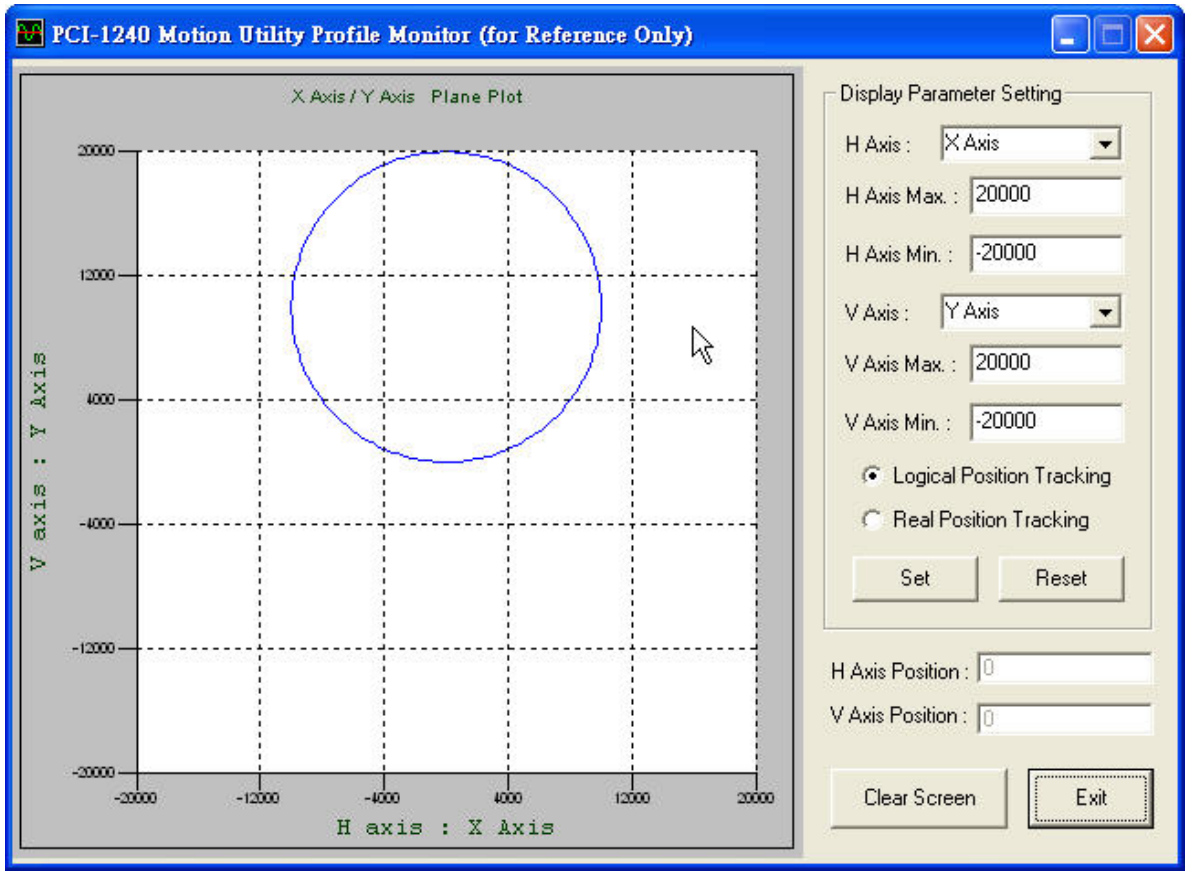
Operation

- **Motion control can be done by clicking “Operation” P-to-P, continuous drive, line interpolation and arc interpolation can be operated**



Utility Operation

- **Potion can be plotted by clicking “Profile Monitor” Any 2 axis can be selected to be traced**



Installation & Testing of PCI-1202U

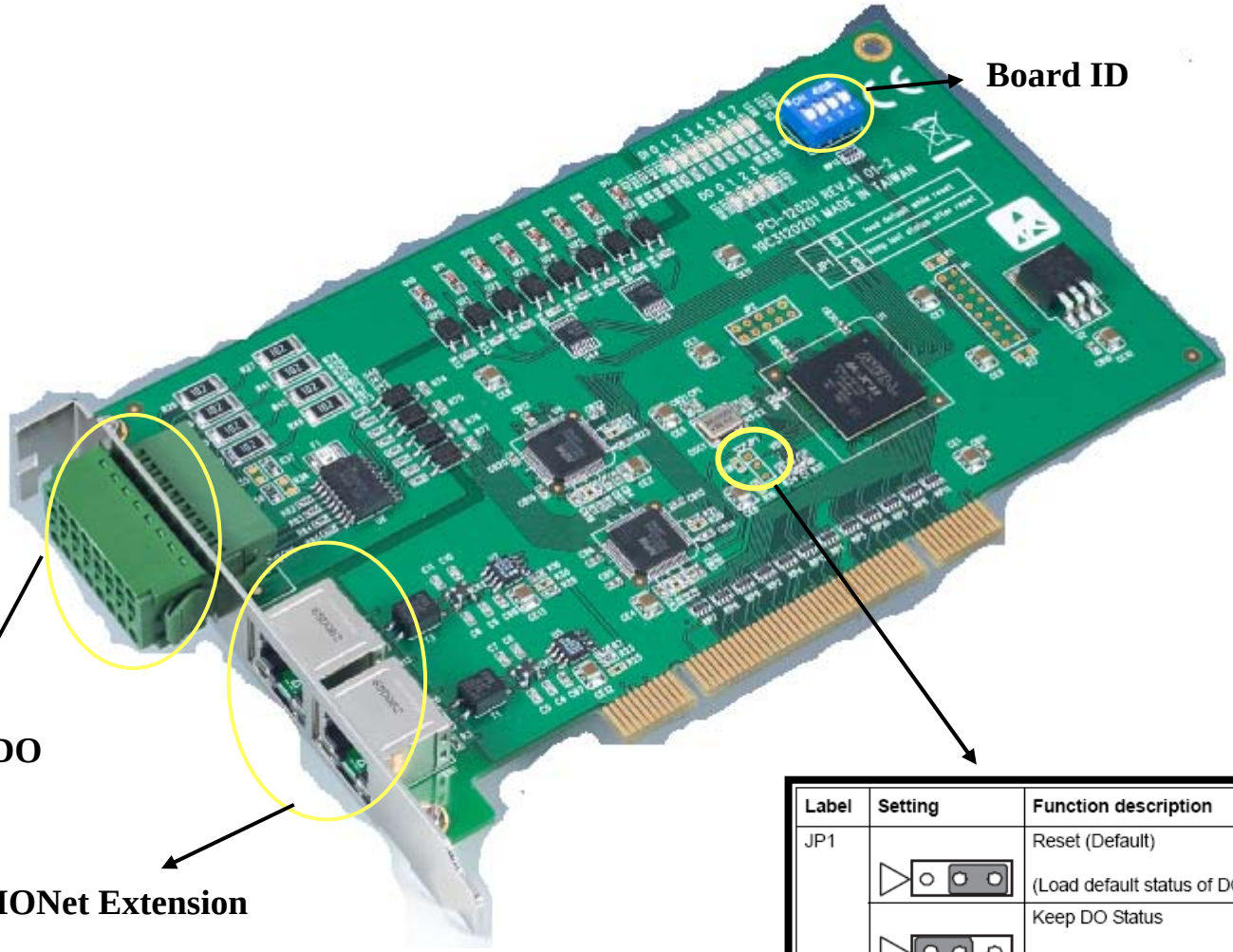
Driver installation

- **Driver:** AMONetDriver.exe
  Source: Companion CD\Drivers\PCI\1240.exe
  Website: http://support.advantech.com.tw/support/DownloadSRDetail.aspx?SR_ID=1-1W8JTJ

- **After the installation, the software manual can be found in** C:\Program Files\Advantech\AMONet\AMONet.chm

- **VB, VC, BCB, C#, VB.NET examples are given at** C:\Program Files\Advantech\AMONet\Example

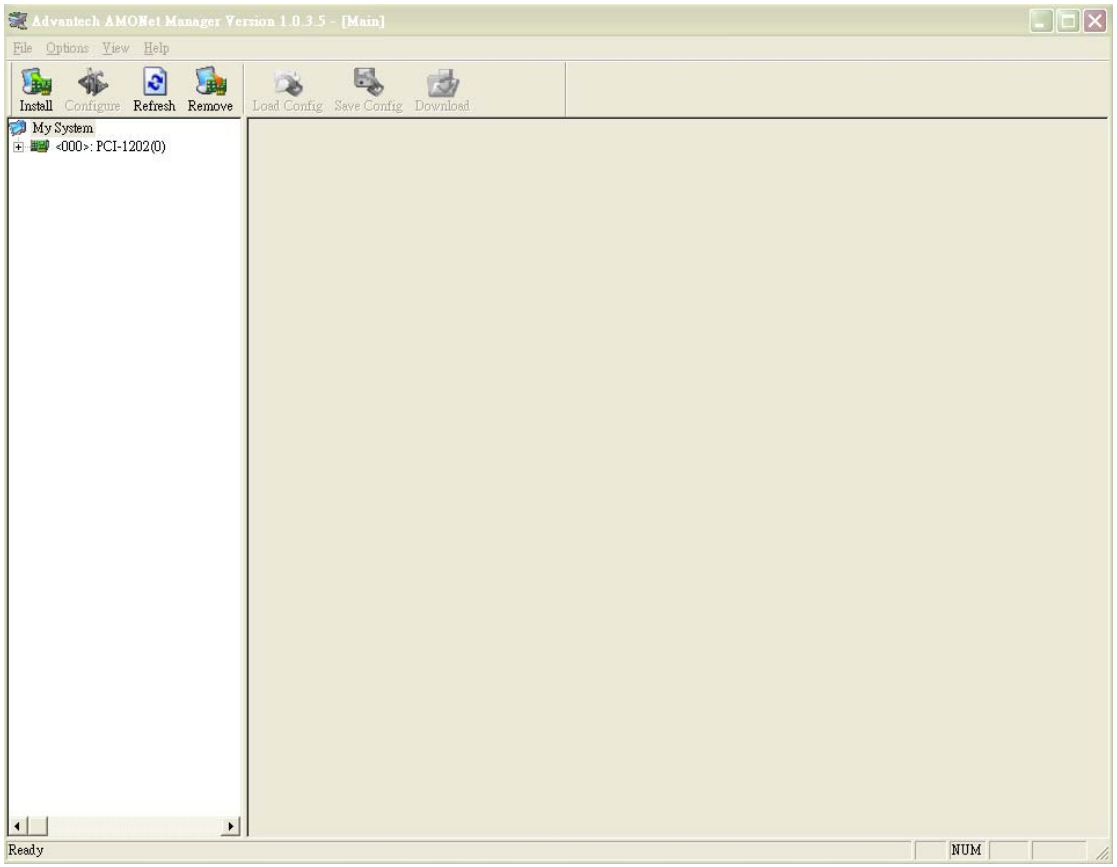
Locations of Jumpers and DIP SWs



Label	Setting	Function description
JP1		Reset (Default) (Load default status of DO while reset)
		Keep DO Status (Keep last status of DO after reset)

Utility Operation

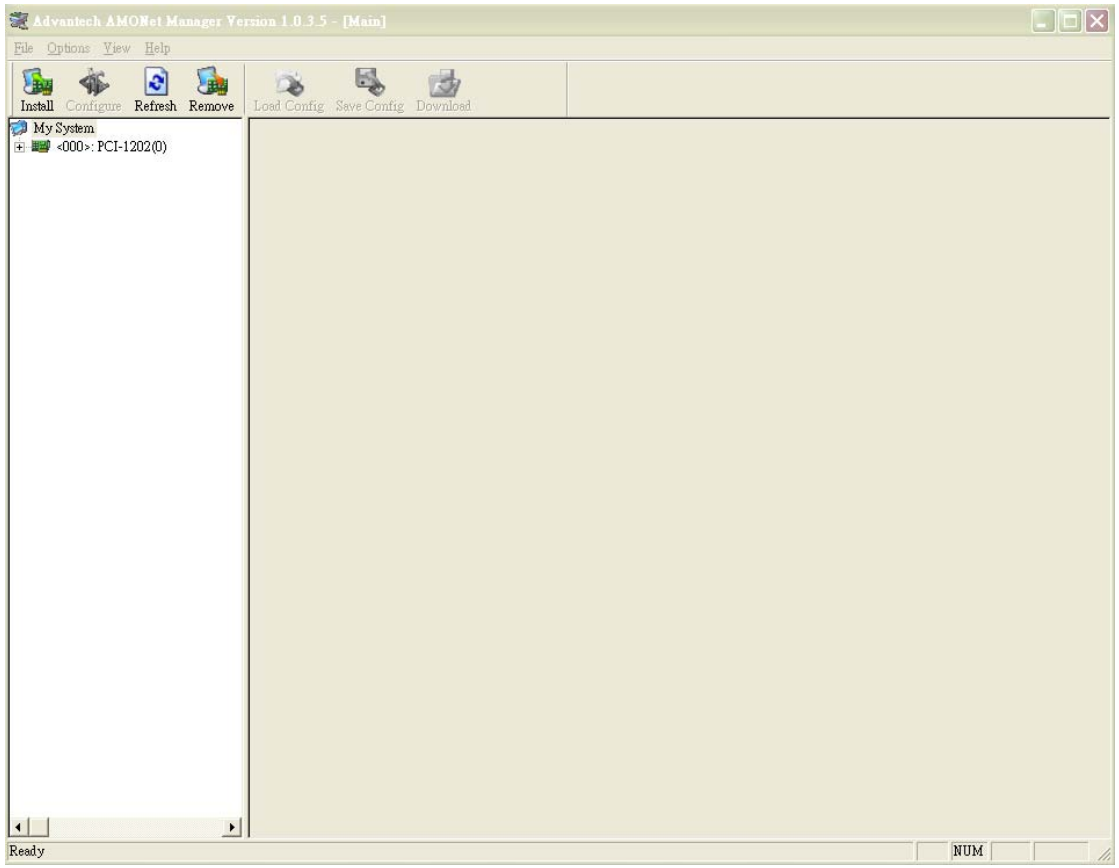
- **Start Manu → Programs →AMONet Device Manager → AMONet Device Manager**



Utility Operation

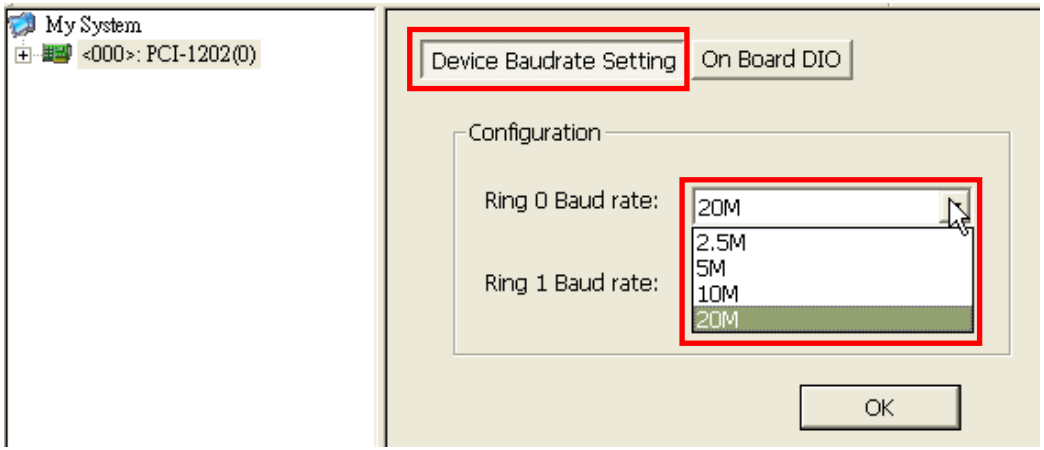
- Click 

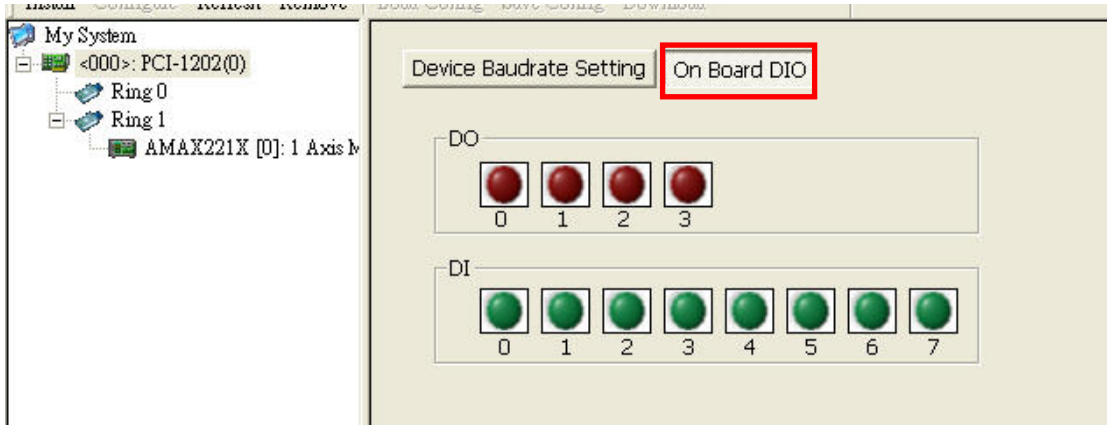
button first



Utility Operation

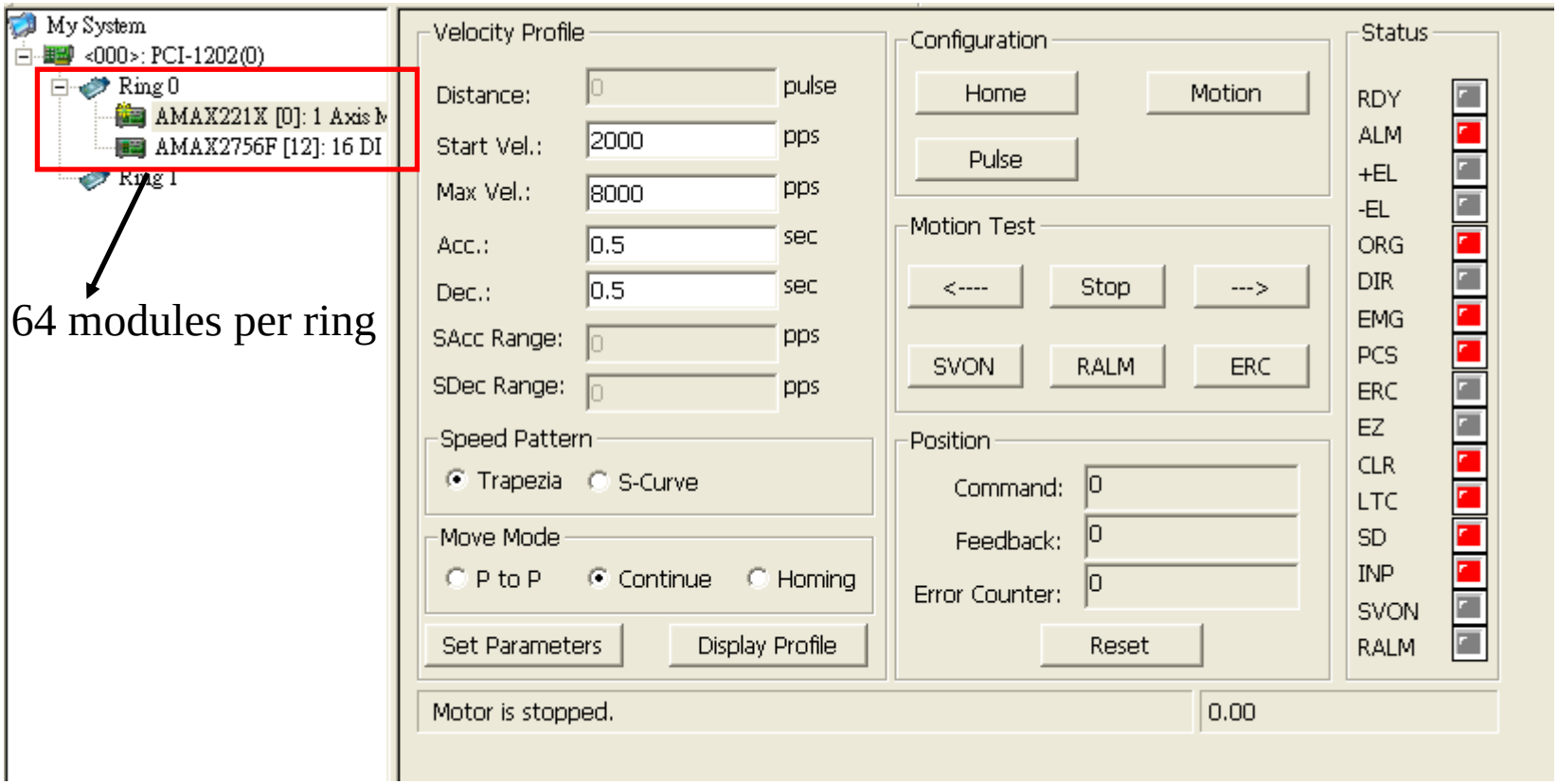
- **Select PCI-1202U, then you'll see the Baudrate setting and on-board DIO control**





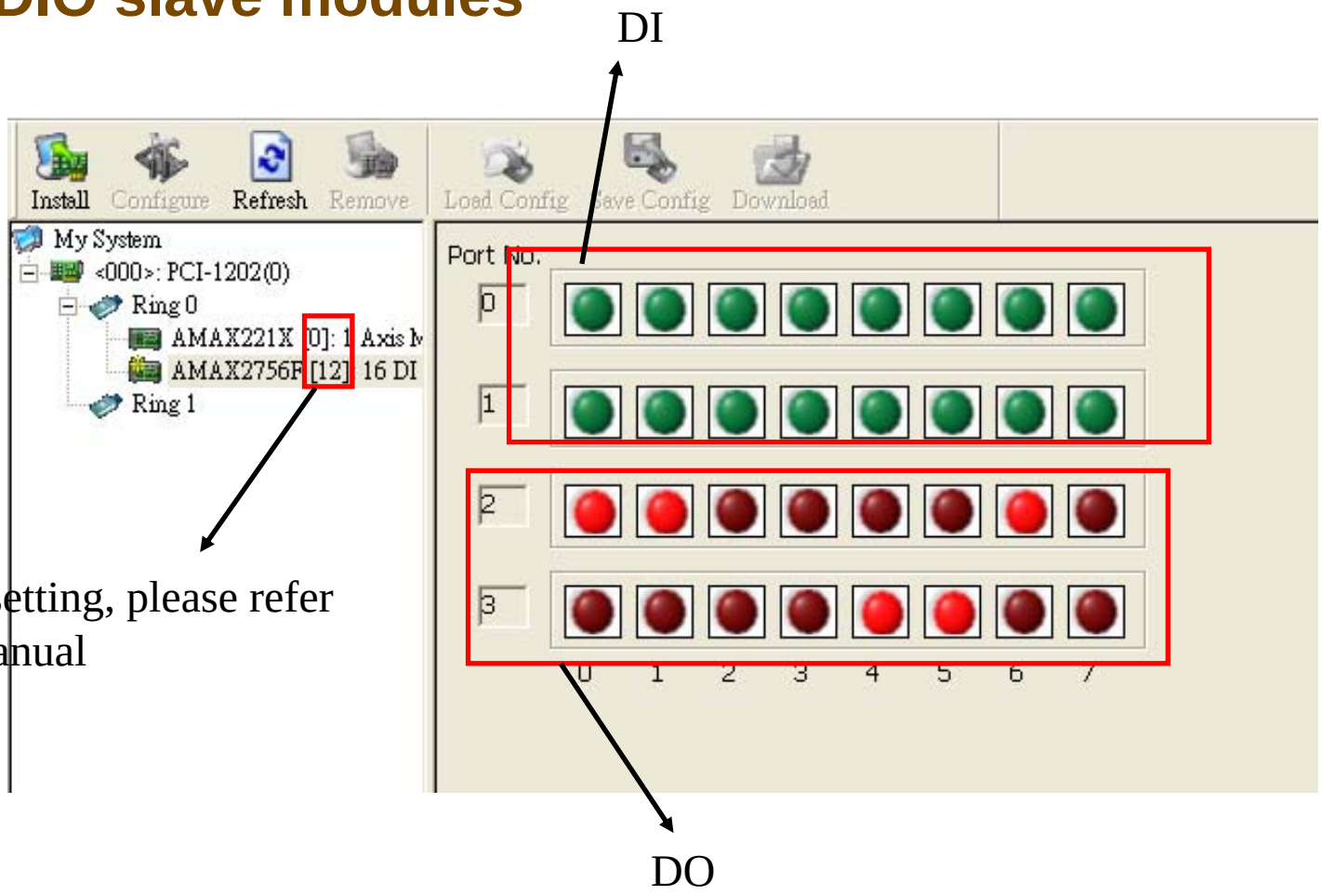
Utility Operation

- **Click “+” button to see slave modules that are connected to PCI-1202**



Utility Operation

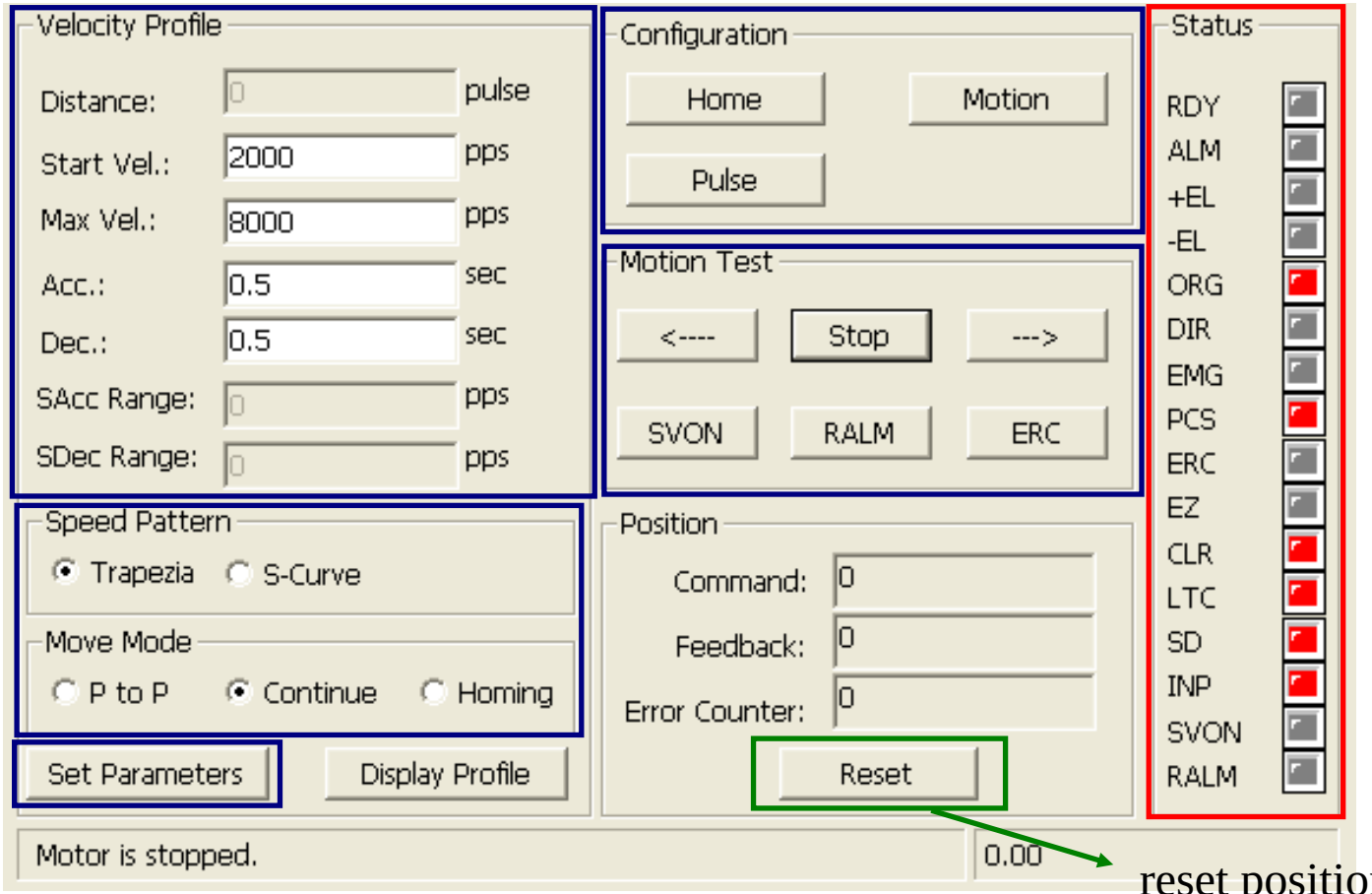
- **Test of DIO slave modules**



About BoardID setting, please refer AMAX series manual

Utility Operation

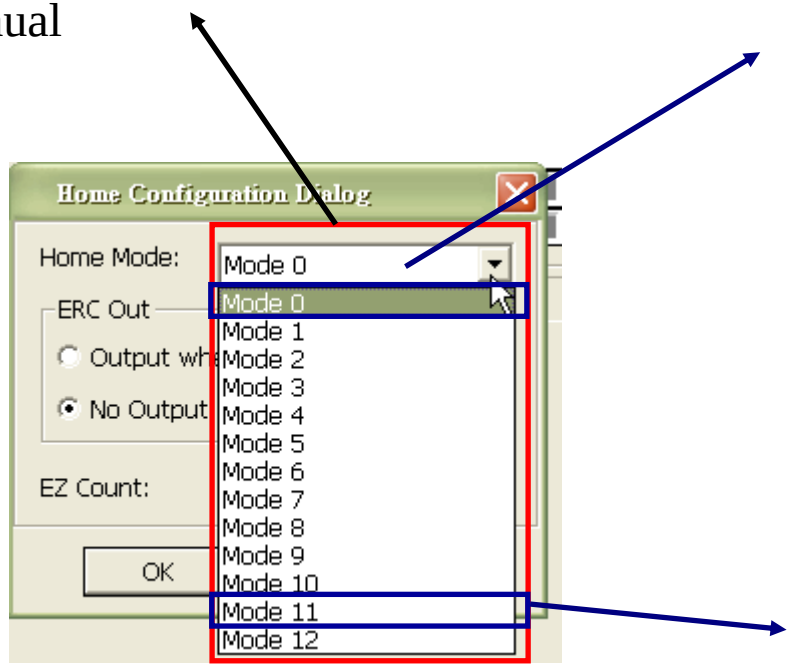
- **Test of motion 1-axis slave modules**



Utility Operation

- **Home mode setting** Home

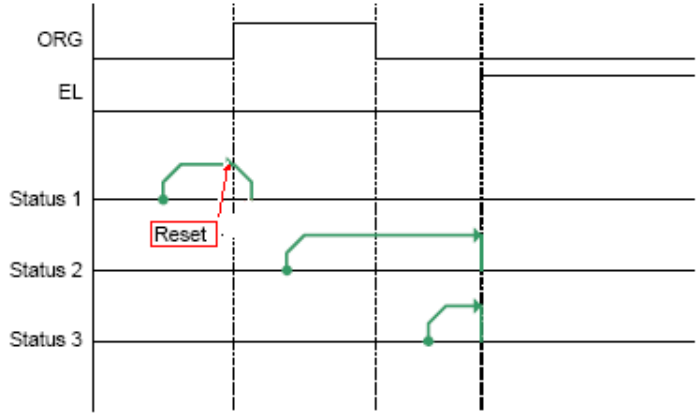
Please refer the software manual



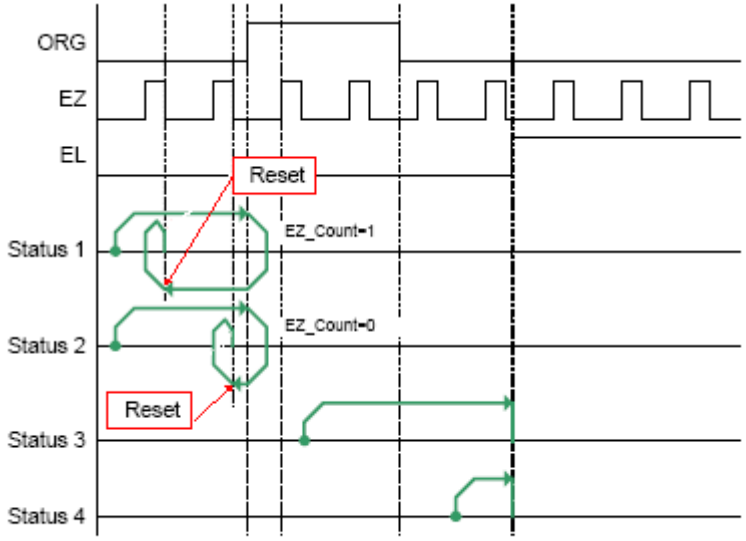
home_mode=0

ORG->Slow down->Stop

- When SD(Ramp-down signal) is inactive



home_mode=0 When SD(Ramp-down signal) is inactive

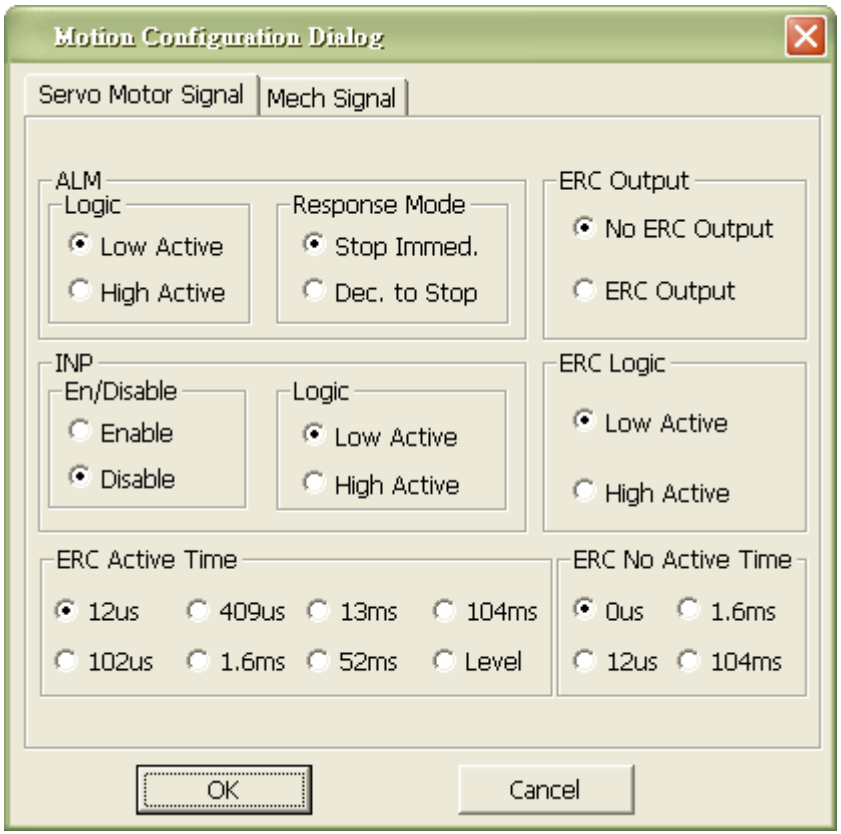


home_mode=11

ORG->Slow down->Go back (backward)->Accelerate to MaxVel->EZ->Slow down->Go back again (forward)->Stop at beginning edge of EZ

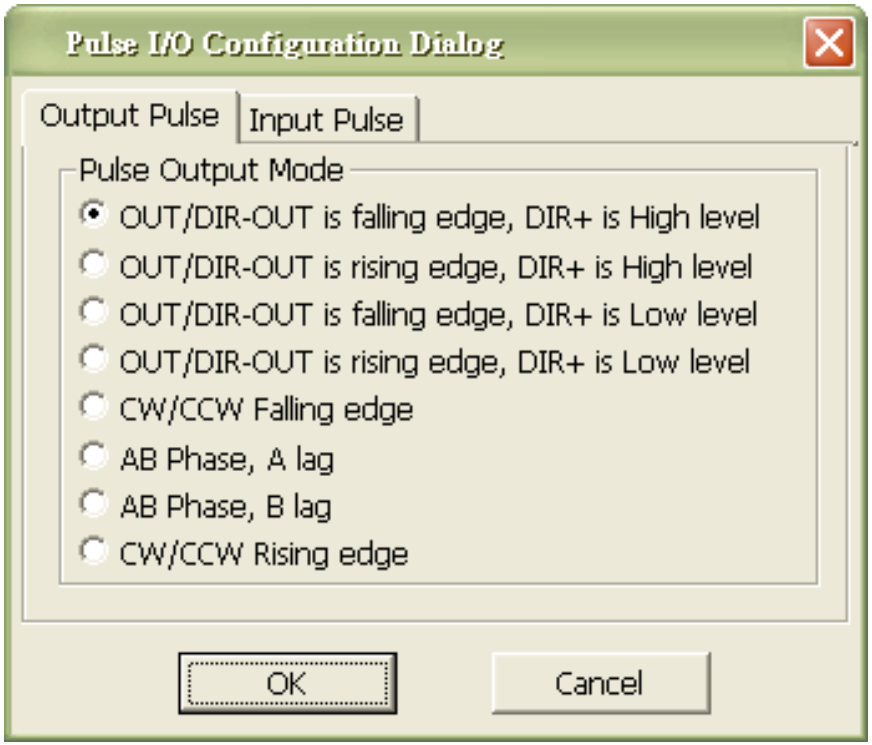
Utility Operation

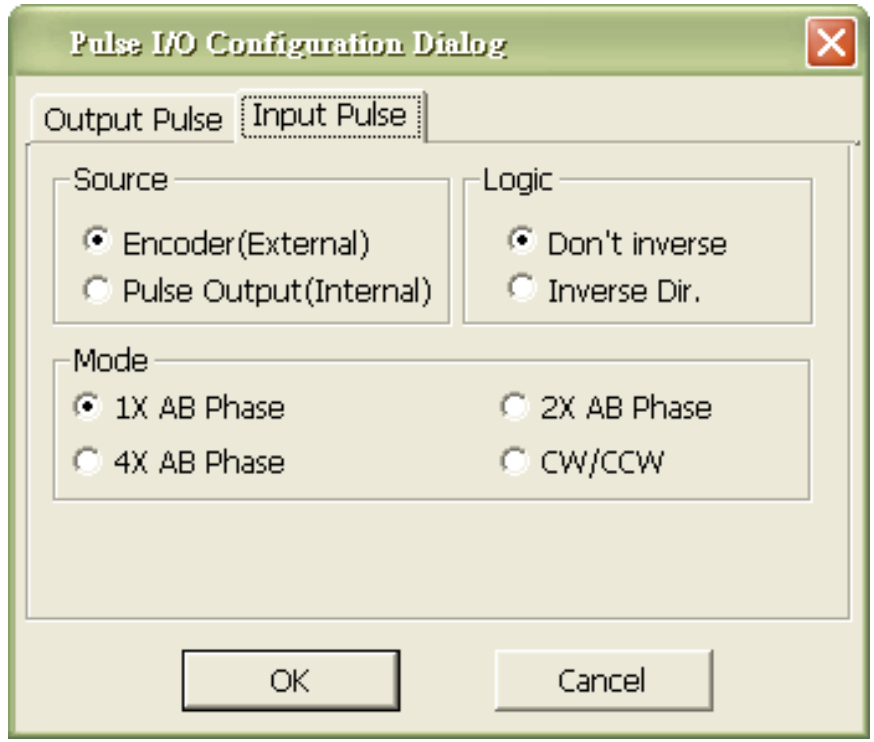
- **Motion IO setting** Motion



Utility Operation

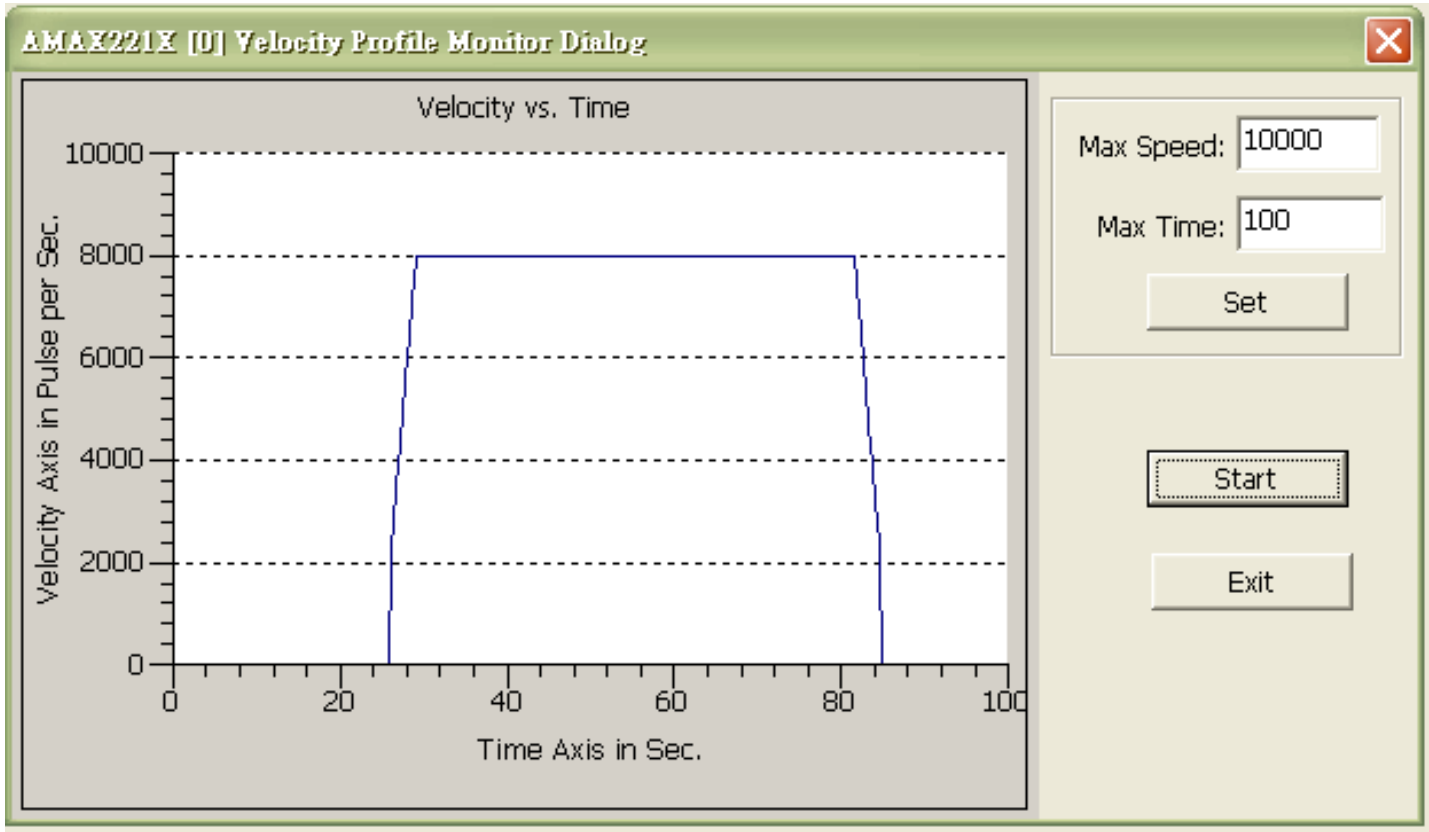
- **Pulse output and input (encoder) setting** Pulse





Utility Operation

- **Velocity profile can be checked** Display Profile



The End & Thank you.